UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 June 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-17,26-41,50 and 51</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17,26-41,50 and 51</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2.   Claims **1-17, 26-41, 50-51** are rejected under 35 U.S.C. 102(a) as being

anticipated by Bert Scalzo ("Oracle DBA Guide to Data Warehousing and Star

Schema"), hereinafter "**Scalzo**".

As per claim 1, Scalzo teaches a method of managing execution of query

operations in a data processing system comprising:

- "issuing, by a requesting entity, a request to perform a composite query operation

  defined by at least an initial query operation and a plurality of subsequent query

  operation to be executed against a data repository of the data processing

  system" at bottom of page 6, ("**upserts**" operation comprises update and insert

  operations) and page 7, (the "pro-C program" including "**while**" loop for executing

  multiple query operations on multiple records)

- "executing the initial query operation" at bottom of page 7, (executing

  "**update_command**");

- "determining an operation status of the initial query operation" at top of page 8, ("if update fails because record not found");

- "selecting one of the plurality of subsequent query operations based on the operation status; performing the selected subsequent query operation" at top of page 8, (Executing insert_command if update fails)

- "updating the operation status based on a result of the subsequent query operation" at page 7 (executing "fgets" to update operation status);

- "managing execution of any remaining subsequent query operations on the basis of the updated operation status" at page 7 (Checking the condition of the "while" loop to determine whether to continue execution or stop);

- "upon determining the composite query operation has completed, returning a result of the composite query operation to the request entity" at page 8 (Termination of query execution if all records are processed).

As per claim 2, Scalzo teaches the method of claim 1, wherein "determining and managing are performed by a composite query operations manager" at pages 7-8.

As per claim 3, Scalzo teaches the method of claim 1, wherein "the requesting entity is an application and wherein the determining and managing are performed by a composite query operations manager" at pages 7-8.

As per claim 4, Scalzo teaches the method of claim 1, wherein "the initial and the subsequent query are SQL statement" at pages 7-8.

As per claim 5, Scalzo teaches the method of claim 1, wherein "determining an operation status of the initial query operation comprises determining a number of items affected by the initial query operation" at pages 7-8.

As per claim 6, Scalzo teaches the method of claim 1, wherein "determining an operation status of the initial query operation comprises determining whether the initial query operation complete successfully" at page 8.

As per claim 7, Scalzo teaches the method of claim 1, wherein "determining an operation status of the initial query operation comprises determining, on the basis of a return code received upon completion of the initial query operation, whether the initial query operation completed successfully" at page 8.

As per claim 8, Scalzo teaches the method of claim 1, wherein "managing execution of the subsequent query operation comprises: executing the subsequent query operation only if the initial query operation did not complete successfully" at page 8.

As per claim 9, Scalzo teaches a method of managing execution of query operations in a data processing system comprising:

- "issuing, by a requesting entity, a request to perform a composite query operation defined by at least an initial query operation and a plurality of subsequent query" at page 6, "upsert operation";

- "providing selection logic defining a next query operation of the composite query operation to e executed" at pages 7-8, the "Pro-C program";

- "providing a plurality of failure conditions for determining when a failure of the composite query operation occurs" at pages 7-8, the "Pro-C program";

- "managing, using a composite query operations manager, execution of the initial query operation and the plurality of subsequent query operation on the basis of the selection logic and the plurality of failure condition" at pages 7-8;

- "upon determining the composite query operation has completed, returning a result of the composite query operation to the request entity" at page 8 (Termination of query execution if all records are processed).

As per claim 10, Scalzo teaches the method of claim 9, wherein at least one failure condition of the plurality of failure conditions indicates the initial query operation and an operation status of the initial query operation which indicates a failure of the composite query operation" at pages 7-8.

As per claim 11, Scalzo teaches the method of claim 10, wherein "each other failure condition of the plurality of failure conditions indicates a series of the initial query operation and at least one of the plurality of subsequent query operations, and an

operation status of the at least one of the plurality of subsequent operation which

indicates a failure of the composite query operation" at pages 7-8.

As per claim 12, ·Scalzo teaches the method of claim 9, wherein "managing

execution of the initial query operation and the plurality of subsequent query operations

comprise a) "executing the initial query operation"; b) determining an operation status of

the initial query operation"; c) determining, on the basis of the operation status and the

plurality of failure condition, whether failure of the composite query operation occurred"

d) "if no failure of the composite query operation occurred: i) determining the next

operation to be executed from the plurality of subsequent query operations using the

selection logic"; ii) "executing the next query operation"; iii) "determining, on the basis of

the operation status of the next query operation"; iv) "determining, on the basis of the

operation status and the plurality of failure conditions, whether failure of the composite

query operation occurred"; v) "repeating step d) for at least one other of the plurality of

subsequent query operations" at pages 7-8;

As per claim 13, Scalzo teaches the method of claim 12, wherein step c) and iv)

comprises, if failure occurred: completing execution of the composite query operation,

and returning a failure code as completion status of the composite query operation

indicating a failure condition from the plurality of failure condition" at pages 7-8.

As per claim 14, Scalzo teaches the method of claim 12, wherein step b) and

step iii) comprise determining whether the respective query operation complete

successfully" at pages 7-8.

As per claim 15, Scalzo teaches the method of claim 12, wherein step b) and iii)

comprise determining, on the basis of a return code received upon completion of the

respective query operation, whether the respective query operation complete

successfully" at pages 7-8.

As per claim 16, Scalzo teaches the method of claim 12, wherein step b) and iii)

comprise determining whether the respective query operation completed successfully

and, if the respective query operation completed successfully: completing executing the

composite query operation" at pages 7-8.

As per claim 17, Scalzo teaches the method of claim 9, wherein "the initial and

each subsequent query operation is an SQL statement" at pages 7-8.

Claims 26-41 and 50-51 recite a computer readable storage medium and a data

processing system for performing similar method as in claims 1-17 and are therefore

rejected by the same reasons.

Response to Arguments

3.   Applicant's arguments filed June 20, 2007 have been fully considered but they

are not persuasive. The examiner respectfully traverses applicant's arguments.

Regarding claims 1, 26 and 50, applicant argued that "Scalzo only teaches the

execution of an "UPDATE" operation or, upon failure, an <u>alternative</u> "INSERT"

operation", but does not teaches a method "that include both executing both "an initial

query operation" and one of a plurality of "subsequent query operation". On the

contrary, Scalzo clearly teaches at pages 7-8 the step of executing an initial query

operation (i.e. "update_command"), and based on the operation status of the initial

query (i.e., "if (sqlca.sqlcode == 1403)"), performing the subsequent operation. Further,

Scalso teaches the UPDATE and INSERT operations are performed within a "WHILE"

loop so that multiple operations are performed while the conditions of the WHILE loop

are true. Scalso therefore teaches at least an initial query and a plurality of subsequent

query operations being executed based on the operation status.

Regarding claims 9, 33, and 51, applicant argued that Scalzo does not teach a

"method of managing execution of query operations in a data processing system" that

includes "managing, using a composite query operation manager, execution of the initial

query operation and the plurality of subsequent query operations on the basis of

selection logic and the plurality of failure condition". Scalzo clearly teaches at pages 7-

8 the step of executing an initial query operation (i.e. "update_command"), and based

on the plurality of failure conditions (i.e., "if (sqlca.sqlcode == 1403)" and if

(sqlca.sqlcode !=0)), performing the subsequent operation. Further, Scalso teaches the

UPDATE and INSERT operations are performed within a "WHILE" loop so that multiple

operations are performed while the conditions of the WHILE loop are true. Scalso

therefore teaches at least an initial query and a plurality of subsequent query operations

being executed based on the basis of selection logic and the plurality of failure

conditions" as claimed.

In light of the foregoing arguments, the 35 U.S.C 102 and 103 rejections are

hereby sustained.

Conclusion

4.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-

4116. The examiner can normally be reached on Monday through Friday 7:30am to

4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khanh B. Pham
Primary Examiner
Art Unit 2166

September 4, 2007